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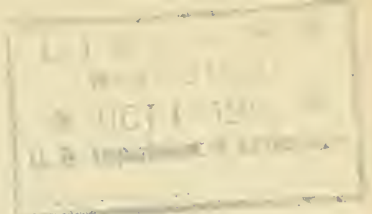


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A CHECK LIST OF THE PUBLICATIONS OF THE DEPARTMENT OF AGRICULTURE
ON THE SUBJECT OF PLANT PATHOLOGY.
1837-1918.

Bibliographical contributions.

Number 1.

June 1919.

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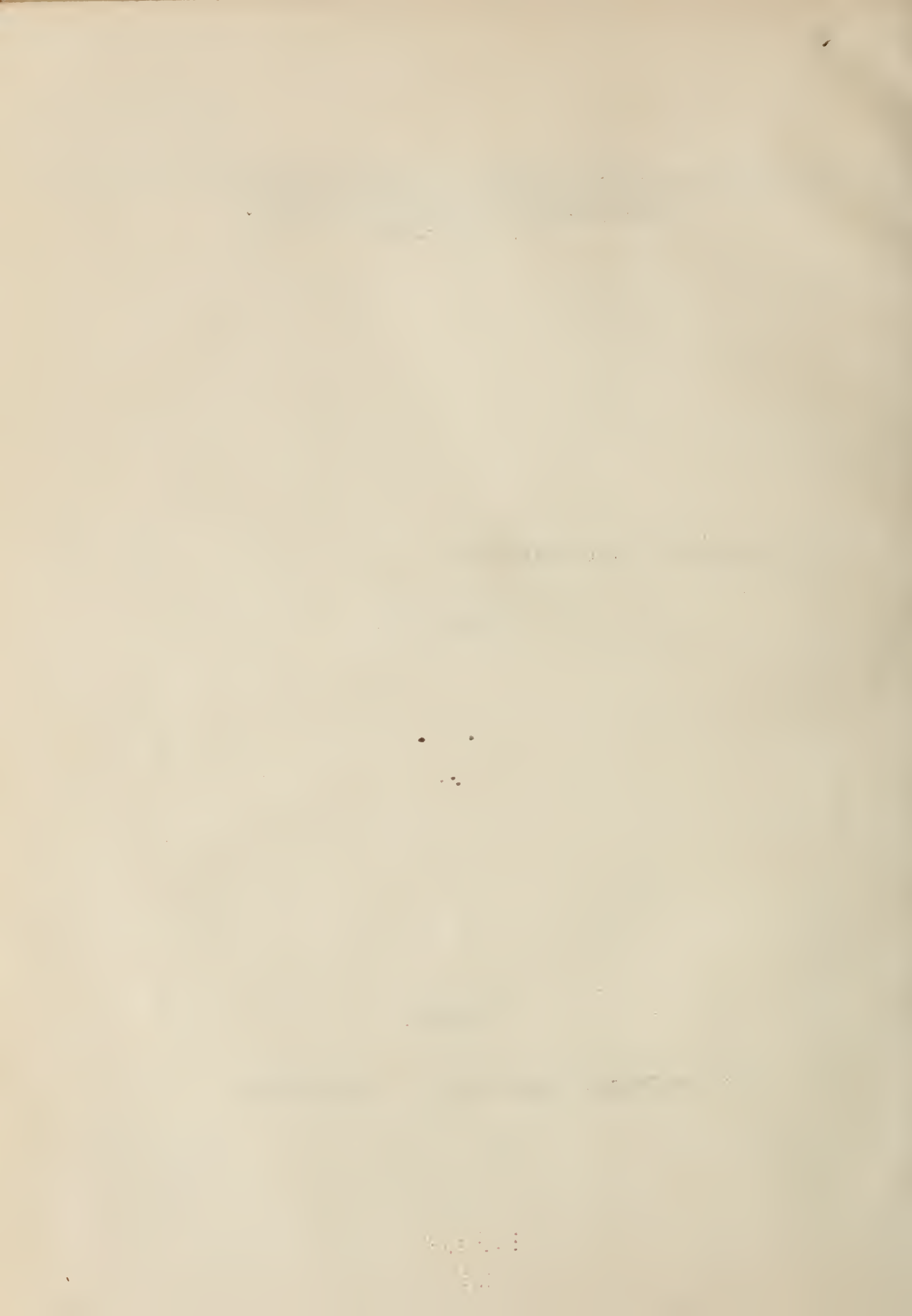
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Number 1. Bibliographical contributions. June, 1919.

A CHECK LIST OF THE PUBLICATIONS OF THE DEPARTMENT OF AGRICULTURE ON THE SUBJECT OF PLANT PATHOLOGY.
1837-1918.

Prepared in the Bureau of Plant Industry Library.

The following list constitutes a check list of all publications issued by the U. S. Department of Agriculture, on the subject of plant pathology, from the earliest reports through 1918.

From 1845 to 1870 the references to plant pathology appeared in the annual reports of the department. They consisted chiefly of signed articles quoted from state horticultural and agricultural society proceedings and farm journals, of abstracts or translations of articles from foreign periodicals, notices of occurrence of diseases of crops in various localities quoted from newspapers or farm journals or from letters received at the department. The first original observations on the subject made by Thomas Taylor and William Saunders, were reported in the annual reports of the microscopist, beginning in 1872. This work was continued in the Mycological Section of the Division of Botany, later called the Section of Vegetable Pathology. On July 1, 1890, the section became the Division of Vegetable Physiology and Pathology. July 1, 1901, the division was united with many others to form the Bureau of Plant Industry, and since that time the pathological work has been carried on by laboratories specializing on the diseases of special crops or groups of plants. For a detailed statement as to the relations of the series of publications of these various sections and divisions see under Bureau of Plant Industry.

In addition to the publications of the offices and laboratories devoted exclusively to the study of plant disease problems, other bureaus and offices have from time to time issued publications of pathological interest. These will be found listed in their alphabetical places.

Publications no longer available are marked "Ex". Those which are for sale at the office of the Superintendent of Documents have prices given. Those having no marks are available for free distribution.

Available numbers of the current series may be procured by application to the Division of Publications, U. S. Department of Agriculture, except separates from the Journal of Agricultural Research for which application should be made to the Librarian, Bureau of Plant Industry.

Please report omissions and corrections to the Librarian of the Bureau of Plant Industry.

The following series are listed herein:

Publications of the department as a whole:

- Annual report.
- Bulletin.
- [Departmental] report.
- Farmers' bulletin.
- Journal of agricultural research.
- Monthly report.
- Posters.
- Program of work.
- Weekly news letter.
- Yearbook.

Publications of divisions or bureaus:

- Division of Botany.
- Bureau of Chemistry.
- Bureau of Entomology.
- Office of Experiment Stations.
- Federal Horticultural Board.
- Forest Service.
- Division of Garden and Grounds.
- Insecticide and Fungicide Board.
- Division of Microscopy.
- Section of Mycology
 - See under Division of Botany.
- Bureau of Plant Industry.
- Division of Pomology.
- Office of the Secretary.
- States Relations Service.
- Division of Vegetable Physiology and Pathology.
- Weather Bureau.

ANNUAL REPORT.

(1839-1860 in Rept. of Commissioner of Patents; agricultural report separate vol. after 1849.) In progress.

From 1842 to 1871 the references to plant diseases in annual reports consisted of signed articles, translations and abstracts, letters and extracts from agricultural and horticultural society publications and farm journals. After 1871 the pathological investigations were carried on by various special divisions whose annual reports appeared in the annual report of the department. These divisions and bureaus were as follows:

- 1871-1876. Division of Microscopy.
- 1872-1889. Division of Botany. (1886 was report of mycologist; 1887-1889 report of chief of the Section of Vegetable Pathology.)
- 1890-1900. Division of Vegetable Physiology and Pathology.
- 1901-1918. Bureau of Plant Industry.
- 1911-1918. Insecticide and Fungicide Board.
- 1913-1918. Federal Horticultural Board.

In addition to these, occasional references to plant pathology appeared in the annual reports of miscellaneous offices and divisions as follows:

- Bureau of Chemistry, 1877, 1882.
- Division of Gardens and Grounds, 1883, 1885, 1887, 1889, 1891, to 1893.

In the following analysis of the reports, signed articles, and unsigned articles of some length only are listed. Many incidental references to diseases have not been included.

- Ex ----1844 [The potato disease.] p. 70-89; p. 202-268. 1845. (Abstr. of discussion in New York State legislature; letters from farmers, and extracts from newspapers and farm journals.)
The rust or blight in wheat. What is it? p. 435-437, 2 fig. 1845.
(From the Ohio Cultivator.)
- Ex --- 1845. Potatoes. [The potato rot.] p. 191-248. 1846. (Discusses spread in U. S. and theories of cause.)
Potato rot in the United States. p. 484-547. 1846. (Short articles and extracts from farm and horticultural papers.)
Potato rot in Europe. p. 548-638. 1846. (Short articles, abstracts and letters from Gard. Chron., Mark Lane Express, Paris Acad. Sci., etc., etc.)
Martius, C.F.P. von. The potato epidemic of last year... p. 668-673; p. 673-676. (Die kartoffel-epidemie der letzten jahre... Munich, 1842
Extracts and trans. by Henry Scholl, and by M. J. Berkley, the latter quoted from Gard Chron., Sept. 13, 27, 1845.)
Martius, C.F.P. von. Report... of... commissioner appointed... for the accurate investigation of the potato disease in the Palitinate. p. 676-688. 1846. (Sendschreiben uber kartoffelkrankheit. Centralbl. Landw. Ver. Bayern, 1845, p. 362-369. Transl. by E. Goodrich Smith.)

DEPARTMENT OF AGRICULTURE

ANNUAL REPORT. (CONTD).

- The spot in tobacco. p.747-749. 1846. (From the Southern Planter)
- Ex ---- 1847. Potato rot. p. 139-155. (Summary of opinions of foreign investigators.)
- Barret, J. On the cultivation of the gooseberry to secure it from the scab. p.472-474. 1848.
- Ex ---- 1848. Potato rot. p.136-143. 1849.
- Fraas, K. N. Summary of opinions of the potato disease. p.563-569. 1849. (Summarium von ansichten uber die kartoffelfaule. Centralbl Landw. Ver. Bayern, transl. by E. Goodrich Smith.)
- Ex ---- 1849. Sidney, Edward. Parasitic fungi. p.391-400. 1850. (From Jour. Roy. Soc. London, v.10, p.382-399.)
- Ex ---- 1850. The potato rot. p.517. 1851. (Reports from newspapers.)
- Ex ---- 1852. Goodrich, C.E. The potato, its natural history, deterioration and improvement. p.354-372. 1853. (From Trans. N. Y. State Agri. Soc. v.11, 1851, p.374-402. 1852.)
- Ex ---- 1853. Schaeffer, G. C. Investigation of the potato disease. p.175-177. 1854. (Letter submitting result of microscopic examination of diseased potatoes.)
- The grape disease in Europe. p. 311-313. 1854. (Letter from Nicholas Pike, U. S. Consul at Oporto, with note by D. J. Browne.)
- Ex ---- 1854. Browne, D. J. Wheat. Diseases. p.136-138. 1855.
- Allen, J. F. Remarks on the grape disease of Europe. p. 311-312. 1855.
- Ex ---- 1855. Glover, Townsend. Accidents and diseases of the cotton plant. p.230-234. 1856.
- Ex ---- 1856. Protz, Wm. Potatoes. Proposed remedy against disease. p.248-250. 1857. (Erforschung der wahren ursache des krankhaften zustandes der kartoffelpflanze, ...Leipzig, 1853. Abstr. by D. Browne.)
- Ex ---- 1857. Glover, Townsend. Investigations on the insects and diseases affecting the cotton plant. p.121-129, illus. 1858.
- Ex ---- 1861. Saunders, Wm. Remarks on grape culture, with reference to mildew, both on the native and foreign varieties. p.495-506, illus. 1862.
- 60¢ ---- 1865. Erni, Henri. The grape disease in Europe, its origin, history, phenomena and cure. p.324-338. pl. 1-4. 1866.
- Lippincott, J. S. Observations on atmospheric humidity. p.520-550. 1866. (Grape diseases, p.542-550.)
- 60¢ ---- 1868. The potato. p.225-244. 1869. (Diseases, p.225-233.)
- 55¢ ---- 1871. Taylor, Thomas. Report on fungoid diseases of plants. p.110-122, fig. 27, pl. 4-17. (1-14 of fungoid series.) 1872.
- Contents: Mildew on the European grape vine; Diseases of the pear; Fungoid diseases of the peach-tree; Mildew diseases of the lilac. (This is the first report to contain original observations and experiments.)
- 55¢ ---- 1872. Taylor, Thomas. Microscopic investigation. p.188-203, fig. 27-38. 1872.
- Contents: Pear-tree blight; Fiji Island Cotton; Onion blight and smut (Genus Peronospora); Yellowws of the peach; Potato blight and rot. (See also Monthly Rpt., 1872).

DEPARTMENT OF AGRICULTURE

ANNUAL REPORT. (CONT.)

- 40¢ ---1873. Taylor, Thomas. Microscopic investigations. p. 183-210. fig. 11-21.
1874. Contents: Hawthorn blight; Potato blight and rot; Black kno
Orange blight; Apple speck cr rot; Onion-rust. (See also Monthly
Rpt. 1873.)
- 40¢ ---1874. Taylor, Thomas. Microscopic observations. p. 161-178. 5 pl. 1875.
Contents: Cranberry rot and scald; Black Knot of plum and cherry
trees; The fungus *Erysiphe Tuckeri*. (See also Monthly Rpt. 1874.)
- 60¢ ---1875. Taylor, Thomas. Microscopic observations. p.187-206. pl. xiv-xv.
1876. Contents: Cellulose and starch: cranberry rot and scald;
Black knot. (See also Monthly Rpt. 1875.)
- 40¢ ---1876. Taylor, Thomas. Microscopic investigations. p. 74-86. pl. 2-8.
1877. Contents: Mushrooms; Microscopic centennial collection of
fungi; *Phylloxera*; *Eucalypti*.
- 70¢ ---1877. McMurtrie, Wm. On the conditions in nature which may influence or
tend to the production of mildew or rot. p.81-89. 1878 (In
Rpt. of the Chemist).
- 1.20 ---1880. Analysis of corn smut (*Ustilago Maidis*). p.136-138. 1878. (In
Rpt. of the Chemist.)
- 80¢ ---1885. Scribner, F.L. Fungous diseases of plants. p.76-87. 1885.
(In Rpt. of the Botanist.)
Trelease, Wm. The smut of timothy (*Tilletia striaeformis*, Westd.)
p.87-88. 1885. (In Rpt. of the Botanist.)
- 1.00 ---1886. Arthur, J.C. Pear blight. *Micrococcus amylovorus* Bur. p.125-129.
1887. (In Rpt. of Mycological Section.)
Trelease, Wm. A spot disease of orchard grass. *Scolecotrichum gram-*
inis Fekl. p.129-131, pl.viii.(In Rpt. of Mycological Section.)

For other pathological material in the Annual Reports, see the re-
ports of the following: Division of Garden and Grounds, Division of
Microscopy, Division of Vegetable Physiology and Pathology; Bureau
of Plant Industry.

BULLETIN.

1913-1918. In progress.

(These bulletins are contributions from the Bureau of
Plant Industry, unless otherwise noted.)

Number.

- 10¢ ----- 40. Allard, H.A. The mosaic disease of tobacco. 1914.
5¢ ----- 44. Hartley, Carl. The blights of coniferous nursery stock. 1913.
10¢ ----- 52. McMurran, S.M. The anthracnose of the mango in Florida. 1914.
15¢ ----- 64. Orton, W.A. Potato wilt, leaf-roll, and related diseases. 1914.
5¢ ----- 81. Orton, W.A. The potato quarantine and the American potato in-
dustry. 1914.
5¢ ----- 82. Melhus, I.E. Powdery scab (*Spongospora subterranea*) of potatoes.
1914.
5¢ ----- 89. Long, W.H. Death of chestnuts and oaks due to *Armillaria mel-*
lea. 1914.

DEPARTMENT OF AGRICULTURE.

BULLETIN (CONT.)

Number

- 5¢ ----- 116. Spaulding, Perley. New facts concerning the white-pine blister rust. 1914.
- 10¢ ----- 120. Ballard, W.S., & Volck, W.H. Apple powdery mildew and its control in the Pajaro Valley. 1914.
- 10¢ ----- 127. Veihmeyer, F.J. The Mycogone disease of mushrooms and its control. 1914.
- 5¢ ----- 169. Hartley, Carl. Injury by disinfectants to seeds and roots in sandy soils. 1915.
- 5¢ ----- 203. Townsend, C.O. Field studies of the crown-gall of sugar beets. 1915.
- 5¢ ----- 212. Weir, J. R. Observations on the pathology of the jack pine. 1915.
- 10¢ ----- 227. Humphrey, C.J., & Fleming, R.M. Toxicity to fungi of various oils and salts, particularly those used in wood preservation. 1915.
- 5¢ ----- 247. Hedgcock, G.G., & Long, W. H. Disease of pines caused by *Cronartium pyriforme*. 1915.
- 10¢ ----- 275. Meinecke, E.P. Forest pathology in forest regulation. 1915.
- 5¢ ----- 317. Weir, J. R. Larch mistletoe: Some economic considerations of its injurious effects. 1916.
- 15¢ ----- 360. Weir, J. R. Mistletoe injury to conifers in the Northwest. 1916.
- 5¢ ----- 368. Brooks, Charles, & Fisher, D. F. Brown-rot of prunes and cherries in the Pacific Northwest, 1916.
- 35¢ ----- 380. Shear, C.L. et al. *Endothia parasitica* and related species. 1917.
- 20¢ ----- 395. Keitt, G. W. Peach scab and its control. 1917.
- 5¢ ----- 444. Shear, C. L. False blossom of the cultivated cranberry. 1916.
- 5¢ ----- 453. Hartley, Carl. Control of damping-off of coniferous seedlings. 1917.
- 5¢ ----- 490. Long, W. H. Preliminary report of the occurrence of western red-rot in *Pinus ponderosa*. 1917.
- 5¢ ----- 496. Long, W. H. Investigations of the rotting of slask in Arkansas. 1917.
- 10¢ ----- 499. Briggs, L.J. et al. The mulched-basin system of irrigated citrus culture and its bearing on the control of mottle-leaf. 1917.
- 10¢ ----- 510. Humphrey, C.J. Timber storage conditions in the eastern and southern states with reference to decay problems. 1917.
- 5¢ ----- 531. Stevens, N.E., & Wilcox, R.B. Rhizopus rot of strawberries in transit, 1917.
- 5¢ ----- 534. Roberts, J.W. Apple blotch and its control, 1917.
- 5¢ ----- 543. Roberts, J. W. Control of peach bacterial spot in southern orchards. 1917.
- 5¢ ----- 562. Garner, W.W. et al. The control of tobacco wilt in the flue-cured district. 1917.
- 5¢ ----- 577. Hawkins, L.A. Experiments in the control of potato leak. 1917.
- 15¢ ----- 587. Ramsey, H.J. et al. Handling and storage of apples in the Pacific northwest. 1917. (Bureau of Markets cooperating.)
- 10¢ ----- 601. Ramsey, H.J. & Markell, E.L. Handling and precooling of Florida lettuce and celery. 1917. (Bureau of Markets cooperating.)
- 5¢ ----- 611. McMurran, S.M. Walnut blight in the eastern United States. 1917.
- 5¢ ----- 629. Parker, J. H. Greenhouse experiments on the rust resistance of oat varieties.
- 10¢ ----- 658. Weir, J.R. & Hubert, E.E. Forest disease surveys. 1918.

DEPARTMENT OF AGRICULTURE.

BULLETIN. (CONT.)

Number

- 10¢ ----- 684. Roberts, J. W. The sources of apple bitter-rot infections. 191
- 5¢ ----- 686. Stevens, N.E. & Further studies of the rots of strawberry
Wilcox, R.B. fruits. 1918.
- 10¢ ----- 712. Fisher, D.F. Apple powdery mildew and its control in the
arid regions of the Pacific northwest. 1918
- 5¢ ----- 714. Shear, C. L., Spoilage of cranberries after harvest. 1918.
et al.
- 10¢ ----- 722. Weir, J. R. A study of heart-rot in western hemlock. 1918.
- 15¢ ----- 727. Gardner, M. W. Anthracnose of cucurbits. 1918.
- 5¢ ----- 734. Coleman, D. A. & Nematode galls as a factor in the marketing and
Regan, S. A. milling of wheat. 1918. (Bur. of Markets cooperat.

[DEPARTMENTAL]REPORT.

Number

- 5¢ ----- 57. Proceedings of the National convention for the suppression of
insect pests and plant diseases by legislation, held at Wash.,
D. C., March 5 & 6, 1897. 1897.
Galloway, B.T. Plant diseases and the possibility of lessen-
ing their spread by legislation. p. 8-11.
Lelong, B.F. The inspection of trees, plants, fruits, etc.,
as conducted under the laws of California.
p. 12-19. (Largely insects).
McCarthy, G. Crop pests and their repression by law. p. 19-20.
(Largely insects.)
- 15¢ ----- 72. Progress of the sugar beet industry in the United States in 1901.
1902.
Townsend, C. O. Some diseases of the sugar beet. p. 90-101.
pl. xii-xv.

FARMERS' BULLETIN.
1891-1918. In Progress.

Number

- 5¢ ----- 4. Galloway, B.T. Fungous diseases of the grape and their treat-
ment. 1891.
- 5¢ ----- 5. [Swingle, W.T.] Treatment of smuts of oats and wheat. 1892.
- 5¢ ----- 7. Spraying fruits for insect pests and fungous diseases. 1892.
- 5¢ ----- 15. Galloway, B.T. Some destructive potato diseases. 1894.
- 5¢ ----- 17. Smith, E. F. Peach yellows and peach rosette. 1894.
- 5¢ ----- 30. Pierce, W. B. Grape diseases on the Pacific coast. 1895.
- 5¢ ----- 38. Galloway, B. T. Spraying for fruit diseases. 1896.
- 5¢ ----- 56. Potato scab. (Exp. Sta. Work I, p. 20-24) 1897.
- Ex ----- 68. Smith, E.F. Black rot of the cabbage. 1898.
- 5¢ ----- 69. Corn smut. (Exp. Sta. Work III, p. 18-20) 1898.

DEPARTMENT OF AGRICULTURE.

FARMERS' BULLETIN. (CONT.)

Number.

5¢ ----	75. Swingle, W.T.	The grain smuts... 1898.
Ex ----	78. Bacterial diseases of plants. (Exp. Sta. Work V, p.24-28)	1898.
5¢ ----	91. Galloway, B. T.	Potato diseases. 1899.
5¢ ----	146. Haywood, J. K.	Insecticides and fungicides; chemical composition and effectiveness of certain preparations. 1902.
Ex ----	153. Piper, C. V.	Orchard enemies in the Pacific northwest. 1902.
5¢ ----	219. Carleton, M. A.	Lessons from the grain-rust epidemic of 1904. 1905.
5¢ ----	221. Shear, C. L.	Fungous diseases of the cranberry. 1905.
Ex ----	231. Orton, W. A.	Spraying for cucumber and melon diseases. 1905.
5¢ ----	243. Waite, M. B.	Fungicides. 1906.
5¢ ----	247. Marlatt, C.L. & Orton, W.A.	The control of the codling moth and apple scab. 1906.
5¢ ----	250. Swingle, W. T.	The prevention of stinking smut of wheat and loose smut of oats. 1906.
5¢ ----	283. Scott, W.M., & Quaintance, A.L.	Spraying for apple diseases and the codling moth in the Ozarks. 1907.
5¢ ----	284. Quaintance, A.L. & Shear, C. L.	Insect and fungous enemies of the grape east of the Rocky Mountains. 1907.
5¢ ----	302. Orton, W. A.	Sea island cotton; its culture, improvement, and diseases. 1907.
5¢ ----	333. Orton, W. A.	Cotton wilt. 1908.
5¢ ----	440. Scott, W. M. & Quaintance, A.L.	Spraying peaches for the control of brown-rot, scab and curculio. 1911.
5¢ ----	467. Metcalf, H., & Collins, J. F.	Control of the chestnut bark disease. 1911.
Ex ----	488. Harter, L.L.	Diseases of cabbage and related crops and their control. 1912.
5¢ ----	489. Spaulding, P., & Field, E. C.	Two dangerous imported plant diseases. 1912.
5¢ ----	492. Quaintance, A.L. & Scott, W. M.	The more important insect and fungous enemies of the fruit and foliage of the apple. 1912.
5¢ ----	507. Johnson, E. C.	Smuts of wheat, oats, barley and corn. 1912.
5¢ ----	544. Orton, W. A.	Potato-tuber diseases. 1913.
5¢ ----	555. Gilbert, W.W.	Cotton anthracnose. 1913.
5¢ ----	618. Townsend, C. O.	Leaf-spot, a disease of the sugar beet. 1914.
5¢ ----	625. Gilbert, W.W.	Cotton wilt and root-knot. 1914.
5¢ ----	648. Bessey, E.A., & Byers, L.P.	Control of root-knot. 1915.
5¢ ----	714. Harter, L.L.	Sweet potato diseases. 1916.
5¢ ----	736. Whetzel, H.H. et al.	Ginseng diseases and their control. 1916.
5¢ ----	742. Spaulding, P.	White-pine blister rust. 1916.
5¢ ----	772. Shaw, H. B.	Control of the sugar-beet nematode. 1916.
5¢ ----	821. Orton, W. A.	Watermelon diseases. 1917.
5¢ ----	856. Orton, W. A., & Chittenden, F.H.	Control of diseases and insect enemies of the home vegetable garden. 1917.
5¢ ----	868. Chittenden, F.H., & Orton, W. A.	How to increase the potato crop by spraying. 1917.

DEPARTMENT OF AGRICULTURE.

FARMERS' BULLETIN. (CONT.)

Number		
5¢ - - - 925.	Harter, L.L., & Jones, L.R.	Cabbage diseases. 1918.
5¢ - - - 938.	Roberts, J.W., & Pierce, L.	Apple-bitter rot and its control. 1918.
5¢ - - - 939.	Humphrey, H.B., & Potter, E.A.	Cereal smuts and the disinfection of seed grain. 1918.
5¢ - - - 994.	Wallace, E., & Evans, L.H.	Commercial bordeaux mixtures. 1918.
5¢ - - - 995.	McMurrin, S.M.	Preventing wood rot in pecan trees. 1918.
5¢ - - - 996.	Beinhart, E.B.	Steam sterilization of seed beds for tobacco and other crops. 1918.

JOURNAL OF AGRICULTURAL RESEARCH.

v.1-15. - - - 1913-1918. - - -

In progress.

(The numbers preceding the references, are the document numbers to be used in requesting reprints. Articles contributed by state experiment stations are included, arranged by station, following the department contributions which are arranged by bureau. Address requests for reprints to the Librarian, Bureau of Plant Industry.)

Bureau of Chemistry.
Contributions.

Ex - - - E-5.	Thom, C., & Currie, J.N.	Aspergillus niger group. v.7, p.1-15. 1916.
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Bureau of Entomology.
Contributions.

K-70.	Stahl, C.F., & Carsner, E.	Obtaining beet leafhoppers nonvirulent as to curly-top v.14, p.393-394. 1918.
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Bureau of Plant Industry.
Contributions.

Volume 1.

G-2.	Long, W.H.	Three undescribed heart-rots of hardwood trees, especially of oak. p.109-128. 1913.
G-5.	Brown, N.A., & Jamieson, C.O.	A bacterium causing a disease of sugar-beet and nasturtium leaves. p.189-210. 1913.
G-6.	Long, W.H.	Polyporus dryadeus, a root parasite on the oak. p.239-250. 1913.
Ex - - - G-7.	Harter, L.L.	The foot-rot of the sweet potato. p.251-274. 1913.
Ex - - - G-9.	Rand, F.V.	Some diseases of pecans. p.303-338. 1914.
G -10.	Ingram, D.F.	A twig blight of Quercus prinus and related species. p.339-346. 1914.

JOURNAL OF AGRICULTURE RESEARCH (CONT.)

Bureau of Plant Industry.
Contributions, (cont.)

Volume 1.

- G-11. Long, W. W. An undescribed species of Gymnosporangium from Japan. p.353-356. 1914.
G-14. Ballard, W. S., Winterspraying with solutions of nitrate of soda. Volck, W.H. p.437-444. 1914.
G-15. Johnson, E.C. A study of some imperfect fungi insolated from wheat, oat and barley plants. P. 475-490. 1914.

Volume 2.

- G-17. Roberts, J.W. Experiments with apple leaf-spot fungi. p.57-66. 1914.
G-18. Heald, F. D., Longevity of pycnospores of the chestnut-blight fungus & Gardner, M.W. gus in soil. p.67-75. 1914.
G-22. Weir, J. R. Two new wood-destroying fungi. p.163-165. 1914.
G-23. Cobb, N. A. Citrus-root nematode. Tylenchus semipenetrans . p.217-230. 1914
G-24. Hedgcock, G.G. & Identity of Peridermium fusiforme with Peridermium Long, W. H. cerebrum. p.247-250. 1914.
G-25. Wollenweber, H.W. Identification of species of Fusarium occurring on the sweet potato, Ipomoea batatas. p.251-286. 1914.
G-27. Long, W.H. Influence of the host on the morphological characters of Puccinia ellisiana and Puccinia andropogonis. p.303-319. 1914.
Ex ---- G-28. Harter, L.L. Fruit-rot, leaf-spot and stem-blight of the eggplant caused by Phomopsis vexans. p.331-338. 1914.
G-29. Potter, A.A. Head smut of sorghum and maize. p.339-372. 1914.
Ex ---- G-30. Bunzel, H.H. Oxidases in healthy and in curly-dwarf potatoes. p.373-404. 1914.
G-31. Heald, F.D. & Birds as carriers of the chestnut-blight fungus. Studhalter, R.A. p.405-422. 1914.

Volume 3.

- G-33. Charles, V.K. & A fungous disease of hemp. p.81-84. 1914. Jenkins, A.E.
G-34. Hedgcock, G.G., Heart-rot of oaks and poplars caused by Polyporus Long, W.H. dryophilus. p.65-78. 1914.
G-36. Orton, W.A. & Pecan rosette. p.149-174. 1914. Rand, F. V.
G-38. Allard, H.A. Effect of dilution upon the infectivity of the virus of the mosaic disease of tobacco. p.295-299. 1915.
G-41. Heald, F.D., Air and wind dissemination of ascospores of the chestnut-blight fungus. p. 493-526. 1915.

Volume 4.

- Ex ---- G-42. Jamieson, C.C. Phoma destructiva, the cause of a fruit rot of the tomato. p.1-20. 1915.
G-43. Roberts, J.W. Sources of the early infections of apple bitter-rot. p.59-64. 1915.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Bureau of Plant Industry.
Contributions, (cont.)

Volume 4.

- G-44. Weir, J. R. Observations on *Rhizina inflata*. p.93-96. 1915.
G-45. Hasse, C. H. *Pseudomonas citri*, the cause of citrus canker.
p. 97-100. 1915.
G-46. Edson, H. A. Seedling diseases of sugar beets and their relation
to root-rot and crown-rot. p.135-168. 1915.
G-47. Pool, V. W., & Phoma betae on the leaves of the sugar beet.
McKay, M. B. p.169-178. 1915.
G-48. Weir, J. R. A new leaf and twig disease of *Picea engelmanni*.
p. 251-254. 1915.
G-49. Kunkel, L. O. A contribution to the life history of *Spongospora*
subterranea. p. 265-278. 1915.
G-50. Edson, H. A. *Rheosporangium aphanidermatus*, a new genus and species
of fungus parasitic on sugar beets and radishes.
p. 279-292. 1915.
G-51. Weir, J. R. *Wallrothiella arceuthobii*. p.369-378. 1915.
G-53. Bryan, M. K. A nasturtium wilt caused by *Bacterium solanacearum*.
p. 451-458. 1915.
G-54. Brown, N. A. A bacterial disease of lettuce. p.475-478. 1915.
G-55. Cobb, N. A. *Tylenchus similis*, the cause of a root disease of
sugar can and banana. p.561-568. 1915.

Volume 5.

- G-56. Edson, H. A. Histological relations of sugar-beet seedling and
Phoma betae. p.55-58. 1915.
Ex ----G-57. Melhus, I. E. Perennial mycelium in species of *Peronosporaceae* re-
lated to *Phytophthora infestans*. p.59-70. 1915.
G-58. Melhus, I. E. Hibernation of *Phytophthora infestans* in the Irish
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G-60. Hedgcock, G. G. Parasitism of *Commandra umbellata*. p.133-135. 1915.
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Vandermeulen, p.181-182. 1915.
G-62. Carpenter, G. W. Some potato tuber-rots caused by species of *Fusarium*.
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G-63. Allard, H. A. Distribution of the virus of the mosaic disease in
capsules, filaments, anthers and pistils of affect-
ed tobacco plants. p.251-256. 1915.
G-64. Rand, F. V. Dissemination of bacterial wilt of cucurbits. p.257-
260. 1915.
G-65. Hedgcock, G. G., & Two new hosts for *Peridermium pyriforme*. p.289-290.
Long, W. H. 1915.
G-66. Rosenbaum, J. Pathogenicity and identity of *Sclerotinia libertiana*
and *Sclerotinia smilacina* on ginseng. p. 291-298.
1915.
G-67. Long, W. H. A honey comb heart-rot of oaks caused by *Stereum sub-*
pileatum. p.421-428. 1915.
G-68. Smith, E. F., & Angular leaf-spot of cucumbers. p.465-476. 1915.
Bryan, M. K.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Bureau of Plant Industry.
Contributions. (Cont.)

Volume 5.

- G-72. Weir, J.R., & Hubert, E.E. A serious disease in forest nurseries caused by *Peridermium filamentosum*. p.781-785. 1916.
G-73. Harter, L.L. Sweet-potato scurf. p.787-792. 1916.
G-74. Pool, V.W., & McKay, M.B. Relation of stomatal movement to infection by *Cercospora beticola*. p.1011-1038. 1916.

Volume 6.

- G-75. Pool, V.W., & McKay, M.B. Climatic conditions as related to *Cercospora beticola*. p.21-60. 1916.
G-76. Meier, F.C. Watermelon stem-end rot. p.149-152. 1916.
G-77. Smith, E.F. Crowngall studies showing changes in plant structures due to a changed stimulus. p.179-182. 1916.
G-78. Hawkins, L.A. Effect of certain species of *Fusarium* on the composition of the potato tuber. p.183-196. 1916.
G-79. Weir, J.R. *Hypoderma deformans*, an undescribed needle fungus of the western yellow pine. p.277-288. 1916.
G-80. Pratt, O.A. A western fieldrot of the Irish potato tuber caused by *Fusarium radiclecola*. p.297-310. 1916.
Ex ---- G-81. Schultz, E.S. Silver-scurf of the Irish potato caused by *Spondylocladium atrovirens*. p. 339-350. 1916.
G-82. Stevens, N.E. Pathological histology of strawberries affected by species of *Botrytis* and *Rhizopus*. p.361-366. 1916.
G-83. Rand, F.V., & Enlows, E.M.A. Transmission of and control of bacterial wilt of cucurbits. p.417-434. 1916.
G-85. Harter, L.L. Storage-rots of economic aroids. p.549-572. 1916.
G-86. Pratt, O.A. Experiments with clean seed potatoes on new land in southern Idaho. p.573-575. 1916.
G-87. Hawkins, L.A. The disease of potatoes known as "leak". p.627-640. 1916.
G-88. Allard, H.A. Some properties of the virus of the mosaic of tobacco. p.649-674. 1916.
G-90. Briggs, L.J., et al Mottle-leaf of citrus trees in relation to conditions. p.721-740. 1916.
Ex ---- G-92. Pratt, O.A. Control of the powdery dryrot of western potatoes caused by *Fusarium trichothecioides*. p.817-832. 1916.

Volume 7.

- G-96. Melhus, I.E., et al *Spongospora subterranea* and *Phoma tuberosa* on the Irish potato. p.213-254. 1916.
G-97. Hawkins, L.A. Growth of parasitic fungi in concentrated solutions. p.255-260. 1916.
G-101 Allard, H.A. A specific mosaic disease in *Nicotiana viscosum* distinct from the mosaic disease of tobacco. p.481-486. 1916.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Bureau of Plant Industry.
Contributions. (Contd.)

Volume 8.

- G-103. Brooks, C., & Cooley, J. S. Temperature relations of apple-rot fungi. p.139-164. 1917.
G-104. Smith, E. F. Mechanism of tumor growth in crown gall. p.165-188. 1917.
G-105. Rand, F. V. Leafspot-rot of pond lilies caused by *Helicosporium nyphaearum*. p.219-232. 1917.
G-106. Rosenbaum, J. Studies of the genus *Phytophthora*. p.233-276. 1917.
G-107. Colley, R. H. Discovery of internal telia produced by a species of *Cronartium*. p.329-332. 1917.

Volume 9.

- G-109. Jensen, C. A. Composition of citrus leaves at various stages of mottling. p.157-166. 1917.
G-114. Rosenbaum, J., & Shapovalov, M. A new strain of *Rhizoctonia solani* on the potato. P.413-419. 1917.

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- G-115. Smith, E. F. A new disease of wheat. p.51-54. 1917.
G-117. Weir, J. R. A needle blight of Douglas fir. p.99-104. 1917.
G-118. Hahn, G. G., et al. A nursery blight of cedars. p. 533-540. 1917.
G-120. Allard, H. A. Further studies of the mosaic disease of tobacco. p.615-632. 1917.

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- G-121. Cobb, N. A. A new parasitic nema, *Tylenchus penetrans*, found infesting cotton and potatoes. p.27-33. 1917.
G-122. Shear, C. L. Endrot of cranberries. p.35-42. 1917.
G-123. Colley, R. H. Diagnosing white-pine blister-rust from its mycelium. p.281-286. 1917.
G-124. Brooks, Chas. & Cooley, J. S. Effect of temperature aeration and humidity on Jonathan spot and scald of apples in storage. p.287-317. 1917.
G-127. Stevens, N. E. Temperatures of the cranberry regions of the U.S. in relation to the growth of certain fungi. p.521-529. 1917.
G-128. Harter, L. L. Podblight of the lima bean caused by *Diaporthe phaseolorum*. p.473-504. 1917.
G-129. Collins, G. N. & Kempton, J. H. Breeding sweet corn resistant to the corn earworm. p.549-572. 1917.

Volume 12.

- G-132. Long, W. H., & Harsch, R. M. Pure cultures of woodrotting fungi on artificial media. p.33-82. 1918.
G-133. Brooks, Chas. & Fisher, D. F. Irrigation experiments on apple-spot diseases. p.109-138. 1918.
G-135. Gravatt, G. F., & Posey, G. B. Gipsy-moth larvae as agents in the dissemination of the white-pine blister-rust. p.459-462. 1918.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Bureau of Plant Industry.
Contributions. (Cont.)

Volume 12.

- G-137. Carpenter, C.W. Wilt diseases of okra and the verticillium-wilt problem. p.529-546. 1918.
G-138. Weir, J. R. Effects of mistletoe on young conifers, p.715-718. 1918.

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- G-139. Pratt, O. A. Soil fungi in relation to diseases of the Irish potato in southern Idaho. p.73-99. 1918.
Ex - - G-141. Enlows, E.M.A. A leafblight of *Kalmia latifolia*. p.199-212. 1918.
G-142. Jones, F. R. Yellow-leaf blotch of alfalfa caused by the fungus, *Pyrenopeziza medicaginis*. p.307-330. 1918.
G-143. Long, W.H. An undescribed canker of poplars and willows caused by *Cytospora chrysosperma*. p.331-345. 1918.
Ex - - G-144. Brown, N.A. Some bacterial diseases of lettuce. p.367-368. 1918.
G-145. Rosenbaum, J., & Ramsey, G.B. Influence of temperature and precipitation on the blackleg of potato. p.507-513. 1918.
G-146. Allard, H.A. Effects of various salts, acids, germicides, etc. upon the infectivity of the virus causing the mosaic disease of tobacco. p.619-637. 1918.
G-147. MacMillan, H.G. Sunscald of beans. p.647-650. 1918.

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- G-148. Harter, L.L., A hitherto-unreported disease of okra. p.207-212. 1918.
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G-152. Hedgcock, G.G., et al Pinon blister-rust. p.411-424. 1918.
G-155. Kunkel, L. O. Tissue invasion by *Plasmodiophora brassicae*. p.543-572. 1918.
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Volume 15.

- Ex - - G-158. Harvey, R.B. Hardening process in plants and developments from frost injury. p.83-104. 1918.
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G-161. Harter, L.L. Sweet-potato storage rots. p.337-368. 1918.
Ex - - G-162. True, R.H., et al Physiological studies of normal and blighted spinach. p.369-408. 1918.
G-163. Tisdale, W.H. Physoderma disease of corn. p.137-154. 1919.
G-166. Hartley, Carl, et al Seedling diseases of conifers. p.521-558. 1918.
G-167. Artschwager, E.F. Histological studies on potato leaf-roll. p.559-570. 1918.
G-168. Jenkins, A.E. Brown canker of roses caused by *Diaporthe umbrina*. p.593-600. 1918.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Bureau of Plant Industry.
Contributions (cont.)

Volume 15.

- G-169. Colley, R.F. The Parasitism, morphology and cytology of *Cronartium Ribicola*. p.619-660. 1918.
G-170. Lee, H. A. Further data on the susceptibility of rutaceous plants to citrus-canker. p.661-666. 1918.

States Relations Service.
Contributions.

- B - 2. Fawcett, G. L. *Pellicularia Koleroga* on coffee in Porto Rico. v.2, p.231-233. 1914.
B- 14. Brandes, E. W. Anthracnose of lettuce caused by *Marssonina panattoniana*. v.13, p.261-280. 1918.

Alabama Agricultural Experiment Station.
Contributions.

- Ala.-1. Wolf, F. A. Further studies on peanut leafspot. v.5, p.891-902. 1916.
Ala.-2. Wolf, F. A. Citrus canker. v.6. p.69-100. 1916.
Ala.-3. Culpepper, C.W., Some effects of blackrot fungus, *Sphaeropsis malorum*, et al upon the chemical composition of the apple. v.7, p. 17-40. 1916.
Ala.-4. Peltier, G.L. Susceptibility and resistance to citrus-canker of the wild relatives, citrus fruits, and hybrids of the genus *Citrus*. v.15, p.337-358. 1918.
Ala.-5. Peltier, G.L., & Neal, D.C. Overwintering of the citrus-canker organism in the bark tissue of hardy citrus hybrids. v.14, p.523-524. 1918.

California Agricultural Experiment Station.
Contributions.

- Cal.-4. Woodworth, C.W. A new spray nozzle. v.5, p.1177-1182. 1916.
Cal.-9. Bioletti, F.T., & Bonnet, Leon. Little-leaf of the vine. v.8, p.381-398. 1917.
Cal.-10. Lee, H. A. A new bacterial citrus disease. v.9, p.1-8. 1917.

Delaware Agricultural Experiment Station.
Contributions.

- Del.-1. Taubenhaus, J.J. Soilstain, or scurf, of the sweet potato. v.5, p.995-1002. 1916.

Georgia Agricultural Experiment Station.
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- Ga.-2 Higgins, B.B. A *Colletotrichum* leafspot of turnips. v.10, p.157-162. 1917.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Indiana Agricultural Experiment Station.
Contributions.

- Ind.-2. Jackson, H.S. An Asiatic species of Gymnosporangium established in Oregon. v.5, p.1003-1010. 1916.
Ind.-3. Osner, G.A. Stemphylium leafspot of cucumbers. v.13, p.295-306. 1918.

Maine Agricultural Experiment Station.
Contributions.

- Me. -4. Shapavalov, M. Effect of temperature on germination and growth of the common potato-scab organism. v.4, p.129-134. 1917.
Me. -9. Morse, W.J. Studies upon the blackleg disease of the potato, with special reference to the relationship of the causal organisms. v.8, p.79-126. 1917.
Me. -10. Ramsey, G.B. A form of potato disease produced by Rhizoctonia. v.9, p.421-426. 1917.

Michigan Agricultural Experiment Station.
Contributions.

- Mich.-2. Coons, G.H. Factors involved in the growth and the pycnidium formation of Plenodomus fuscomaculans. v.5, p.713-769. 1916.

Minnesota Agricultural Experiment Station.
Contributions.

- Minn.-4. Stakman, E.C. Relation between Puccinia graminis and plants highly resistant to its attack. v.4, p.193-200. 1915.
Ex ---- Minn.-6. Stakman, E.C. & Jensen, L. Infection experiments with timothy rust. v.5, p.211-216. 1915.
Ex ---- Minn.-7. Valteau, W.D. Varietal resistance of plums to brown-rot. v.5, p.365-396. 1915.
Ex ---- Minn.-10. Stakman, E.C. & Piemeisel, F.J. Infection of timothy by Puccinia graminis. v.6, p.813-836. 1916.
Minn.-19. Stakman, E.C. & Piemeisel, F.J. Biologic forms of Puccinia graminis on cereals and grasses. v.10, p.429-496. 1917.
Minn.-21. Moore, Wm. Studies in greenhouse fumigation with hydrocyanic acid; physiological effects on the plant. v.11, p.319-338. 1917.
Minn.-30. Levine, M.N. & Stakman, E.C. A third biologic form of Puccinia graminis on wheat. v.12, p.651-654. 1918.
Minn.-31. Stakman, E.C., Parker, J.H., & Piemeisel, F.J. Can biologic forms of stemrust on wheat change rapidly enough to interfere with breeding for rust resistance? v.14, p.111-124. 1918.
Minn.-33. Stakman, E.C., Piemeisel, F.J., & Levine, M.N. Plasticity of biologic forms of Puccinia graminis. v.15, p.221-250. 1918.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Mississippi Agricultural Experiment Station.
Contributions.

- Miss.Ml. Brown,H.B. Life history and poisonous properties of *Claviceps paspali*. v.7, p.401-406. 1916.

Montana Agricultural Experiment Station.
Contributions.

- Mont.-4. Swingle,D.B.,& Arsenical injury through the bark of fruit trees.
Morris, H.E. v.8, p.283-318. 1917.

New Jersey Agricultural Experiment Station.
Contributions.

- N.J. -4. Martin,V.H. Influence of Bordeaux mixture on the rates of transpiration from abscised leaves and from potted plants. v.7, p.529-548. 1916.

New York (Geneva) Agricultural Experiment Station.
Contributions.

- N.Y.(Geneva)-2. Gloyer,W.O. *Ascochyta clematidina*, the cause of stem-rot and leaf-spot of clematis. v.4, p.331-342. 1915.

North Carolina Agricultural Experiment Station.
Contributions.

- N.C. -3. Wolf,F.A. Squash disease caused by *Choanephora cucurbitarum*. v.8, p.319-328. 1917.
N.C. -4. Cromwell, R.O. Fusarium-blight, or wilt disease, of the soybean. v.8, p.421-439. 1917.
N.C. -5. Wolf,F.A.,& Xylaria root rot of apple. v.9, p.269-276. 1917.
Cromwell,R.O.
N.C. -9. Wolf,F.A.,& Tobacco wildfire. v.12, p.449-458. 1918.
Foster, A.C.
N.C. -10. Wolf, F.A. Intumescences, with a note on mechanical injury as a cause of their development. v.13, p.253-260. 1918.

South Carolina Agricultural Experiment Station.
Contributions.

- S.C. -1. Faulwetter,R.S. Dissemination of the angular leaf-spot of cotton. v.8, p.457-475. 1917.
- S.C. -2. Faulwetter,R.C. Wind-blown rain, a factor in disease dissemination. v.10, p.639-648. 1917.

JOURNAL OF AGRICULTURAL RESEARCH (CONT.)

Texas Agricultural Experiment Station.
Contributions.

Tex. -1. Taubenhaus, J.J. Pox or pit (soilrot), of the sweet potato. v.13,
p. 437-450. 1918.

Vermont Agricultural Experiment Station.
Contributions.

Vt. -1. Bartram, H.E. Effect of natural low temperature on certain fungi
and bacteria. v.5, p.651-655. 1916.

Virginia (Blacksburg) Agricultural Experiment Station.
Contributions.

Va.(Blacksburg)-1. Fromme, F.D., & Black rot of the apple. v.10,
Thomas, H.E. p.165-174. 1917.

Virginia (Norfolk) Agricultural Experiment Station.
Contributions.

- Va.-1 Smith, L.B. Relationship between the wetting power and ef-
ficiency of nicotine-sulphate and fish-oil-scrap
sprays. v.7, p. 389-399. 1916.
- Va.-2. McClintock, J.A. Peanut-wilt caused by Sclerotium rolfsii. v.8,
p. 441-448. 1917.
- Va.(Norfolk)-3. McClintock, J.A. True nature of spinach-blight and relation
& Smith, L.B. of insects to its transmission. v.14, p.1-60.
1918.

Wisconsin Agricultural Experiment Station.
Contributions.

- Wis. -6. Johnson, James. Host plants of Thielavia basicola. v.7, p.289-300.
1916.
- Wis.-8. Tisdale, W. H. Flaxwilt: a study of the nature and inheritance of
wilt resistance. v.11, p.573-606. 1917.
- Wis. -9. Jones, L.R., et al. Bacterial-blight of barley. v.11, p. 625-644. 1917.
- Wis. -12. Keitt, G. W. Inoculation experiments with species of Coccomyces
from stone fruits. v.13, p.539-569. 1918.

MONTHLY REPORT.
1863-1876.

- Ex - - 1863. [Grape mildew] July, p.12.
Mildew, Aug., p.13-14.
- Ex - - 1865. How to use diseases potatoes [for feeding]. Oct., p.27. (From Agr. Gaz. Lond.)
- Ex - - 1867. Saunders, Wm. Mildew on the grape. p.330-333. (Paper read before the Amer. Pomol. Soc., St. Louis, Mo.)
- Ex - - 1869. Potato disease. p.64-65. (Abstr. of tract by W. Taylor, Renfrewshire, Eng. on "The potato disease; its cause and cure.")
- Ex - - 1872. Taylor, Thomas. Microscopic investigations. p.225-229, 387-389, 449-507-511. (Also in Ann. Rpt. 1872, q.v. for contents.)
- Ex - - 1873. Taylor, Thomas. Microscopic investigations, p.118-123, 431-433, 588-594. (Also in Ann. Rpt. 1873, q.v. for contents.)
- Microscopic observations. [Potato disease, Phytophthora infestans] p.251-253, fig. 6, 1873.
- Price, M.M. The vine disease in France. p.172-174.
- ~~Ex~~ Ex - - 1874. Taylor, Thomas. Microscopic observations. p.52-54, 228-231, 439-449, (Also in Ann. Rpt. 1874, q.v. for contents.)
- Microscopic observations. [Relation of Artotrogus hydnosporus to Peronospora infestans on the potato p.273-275. illus.
- Ex - - 1875. Taylor, Thomas. Microscopic observations. p.42-44. 316-319, 445-448. (Same slightly abridged in Ann. Rpt. 1875, p. 193-196.)
- Ex - - 1876. Taylor, Thomas. Microscopic observations. Cranberry rot. p.350-353. illus.
- [Grape mildew] . p.464-465.

[POSTERS.]
1918.

- Destroy the common barberry. 1918.
- Fight the wheat rust. Banish the barberry and save the wheat. 1918.
- Increase yield by preventing smut of wheat, oats, barley, and rye. 1918.
- Ex - - Save your pines. Help stamp out white pine blister disease. 1918.
- Ex - - Spray potato fields with an arsenical in Bordeaux mixture to control potato beetles and diseases that affect the leaves. 1918. (Bur. Entomology and Bur. Plant Industry cooperating.)
- Ex - - Spray schedule for apple. 1918. (Bur. Entomology and Bur. Plant Industry cooperating.)

PROGRAM OF WORK.
1915 - 1918.

Under Bureau of Plant Industry, the various projects relating to plant pathology are described.

DEPARTMENT OF AGRICULTURE.

WEEKLY NEWS LETTER.
v.1-5, 1913-1918, In progress.

Contains popular notes on plant diseases, the information in practically all cases, having appeared in more complete form in some other publication of the Department.

YEARBOOK.

1894-1917. (Publ. 1895-1912) In progress.

- Ex - - 1894. Swingle, W.T. The grain smuts; their causes and prevention. p.409-420.
Webber, H.J. Fertilization of the soil as affecting the orange in health and disease. p.193-202.
Treatment for fungous diseases of plants: Formulas for fungicides. p.577-580.
- 55¢ - - 1895. Galloway, B.T. Frosts and freezes as affecting cultivated plants. p.143-152.
Galloway, B.T. The health of plants in greenhouses. p.247-256.
Waite, M.B. The cause and prevention of pear blight. p.295-300.
Webber, H.J. The two freezes of 1894-95 in Florida, and what they teach. p.159-174.
Woods, A.F. Principles of pruning and care of wounds in woody plants. p.257-268.
Treatment for fungous diseases of plants: Formulas for fungicides. p.587-590.
- 50¢ - - 1896. Galloway, B.T. Diseases of shade and ornamental trees. p.237-254.
& Woods, A.F.
Treatment for fungous diseases of plants: Formulas for fungicides. p.625-628.
- 60¢ - - 1897. Coville, F.V. Division of botany. p.90-99.
(Fungous diseases of plants. p.93-94.)
Galloway, B.T. Division of vegetable physiology and pathology, p.99-111.
Treatment for fungous diseases of plants: Formulas for fungicides. p.673-676.
- 60¢ - - 1898. Woods, A.F. Work in vegetable physiology and pathology. p.261-266.
plant diseases in the United States in 1898. p.652.
- 75¢ - - 1899. Galloway, B. T. Progress in the treatment of plant diseases in the United States. P. 191-200.
Plant diseases in the United States in 1899. p.750-751.
- 75¢ - - 1900. Schrenk, H.von Fungous diseases of forest trees. p.199-210.
Plant diseases in the United States in 1900. p.729-731.
- 80¢ - - 1901. Woods, A. F. The relation of nutrition to the health of plants. p.155-176.
Orton, W. A. Plant diseases in the United States in 1901. p.668-672.
- 75¢ - - 1902. Galloway, B.T. Industrial progress in plant work. p.219-230. (Includes progress in plant pathology.)
Orton, W.A. Plant diseases in the United States in 1902. p.714-719.
- 65¢ - - 1903. Orton, W.A. Plant diseases in 1903. p.550-555.
- Ex - - 1904. Galloway, B.T. Work of the Bureau of Plant Industry in meeting the ravages of the boll weevil and some diseases of cotton. p.497-508.
Orton, W. A. Plant diseases in 1904. p.581-586.
Woods, A.F. The relation of plant physiology to the development of agriculture. p.119-132. (Nature and causes of plant diseases. p.125-128.)

DEPARTMENT OF AGRICULTURE.

YEARBOOK. (CONT.)

- \$1.00 - - 1905. Orton, W.A. Plant diseases in 1905. p.602-611.
\$1.00 - - 1906. Orton, W.A. Plant diseases in 1906. p.499-508.
\$1.00 - - 1907. Galloway, B.T. Progress in some of the new work of the Bureau of
Plant Industry. p.139-148. (Rust-resistant
asparagus, p.141-142.)
Metcalf, Haven, Diseases of ornamental trees. p.483-494.
Orton, W.A., & Plant diseases in 1907. p.577-589.
Ames, Adeline.
\$1.25 - - 1908. Orton, W.A. The development of farm crops resistant to disease.
p.453-464.
Orton, W.A. Plant diseases in 1908. p.533-538.
\$1.00 - - 1909. Brackett, G.B. Prevention of frost injury to fruit crops. p.357-364.
\$1.00 - - 1912. Metcalf, Haven The chestnut bark disease. p.363-373.
75¢ - - 1913. Collins, J.F. Practical tree surgery. p.163-190.
75¢ - - 1914. Cobb, N.A. Nematodes and their relationships. p.457-490.
\$1.00 - - 1916. Kellerman, K.F. Cooperative work for eradicating citrus canker.
p.267-272.
\$1.00 - - 1917. Humphrey, H.B. Cereal diseases and the national food supply. 1918.

DIVISION OF BOTANY.

Annual report,

See under Annual Report of the Department 1885, 1886.

Bulletin. 1886-1901.

- Ex - - - 2. Scribner, F.L. Report on the fungus diseases of the grape vine. 1886.
Ex - - - 5. Scribner, F.L. Report on the experiments made in 1887 in the treat-
ment of the downy mildew and the black-rot of
the grape vine. 1888.
5¢ - - - 7. Scribner, F.L., Black rot (*Laestadia Bidwellii*) 1888.
& Viala, Pierre
5¢ - - - 8. Vasey, Geo., & A record of some of the work of the division, etc.
Galloway, B.T. 1889. (Pt. II. Section of vegetable pathology
by Galloway, p.41-67.)
50¢ - - 9. Smith, E.F. Peach yellows; a preliminary report. 1888.
Ex - - - 10. Report on the experiments made in 1888 in the treatment of the
downy mildew and black rot of the grape vine. 1889.
10¢ - - 11. Galloway, B.T. Report on the experiments made in 1889 in the
treatment of the fungous diseases of plants.
1890.

The above bulletins contributed by the Section of Vegetable Pathology.

For Circulars of the Section of Vegetable Pathology, see under
Division of Vegetable Physiology and Pathology.

BUREAU OF CHEMISTRY.

Annual Report.

See under Annual Report of Department 1877, 1880.

Bulletin. 1899-1918. In progress.

- 10¢ - - - 57. Proc. 16th Ann. Conv. Assoc. Off. Agr. Chem. 1899. 1899.
Voorhees, L.A. Report on fungicides and insecticides. p.101-105.
- 10¢ - - - 62. Proc. 17th Ann. Conv. Assoc. Off. Agr. Chem. 1900. 1901.
Voorhees, L.A. Report on fungicides and insecticides. p.139-143.
- 10¢ - - - 67. Proc. 18th Ann. Conv. Assoc. Off. Agr. Chem. 1901. 1902.
Voorhees, L.A. Insecticides and fungicides. p. 87-96.
- Ex - - - 68. Haywood, J.K. The chemical composition of insecticides and fungicides with an account of the methods of analysis employed. 1902.
- 10¢ - - - 73. Proc. 19th Ann. Conv. Assoc. Off. Agr. Chem. 1902. 1903.
Haywood, J.K. Report on insecticides and fungicides. p.158-169.
- Ex - - - 76. Haywood, J.K. Insecticide studies. 1903.
II. A compilation of analyses of insecticides and fungicides. p.23-56.
- 15¢ - - - 81. Proc. 20th Ann. Conv. Assoc. Off. Agr. Chem. 1903. 1904.
Haywood, J.K. Report on insecticides and fungicides. p.195-206.
- 15¢ - - - 90. Proc. 21st Ann. Conv. Assoc. Off. Agr. Chem. 1904. 1905.
Smith, B.H. Report on insecticides, fungicides, and disinfectants. p.95-104.
- 20¢ - - - 99. Proc. 22d Ann. Conv. Assoc. Off. Agr. Chem. 1905. 1906.
Smith, B.H. Report on insecticides, fungicides, and disinfectants. p.26-33.
- Haywood, J.K. A study of the lime-sulphur-salt-soda wash. p.35-39.
- Ex - - - 101. Haywood, J.K. The lime-sulphur-salt-wash and its substitutes. 1907.
- Ex - - - 162. Proc. 29th Ann. Conv. Assoc. Off. Agr. Chem. 1912. 1913.
McDonnell, Composition and methods of analysis of lime-sulphur solution. p. 38-43.

Circular. 1894-1918. In progress.

- 5¢ - - - 10[Haywood, J.K.] Methods for the analysis of insecticides and fungicides. 1902. Rev. ed., 1905.

DIVISION OF ENTOMOLOGY.

Bulletin. 1899-1903.

- Ex - - - 20. Neal, J.C. The root-knot disease of the peach, orange, and other plants in Florida, due to the work of Anguillula. 1889.
- 10¢ - - - n.s.38. Some miscellaneous results of the work of the Division of Entomology. 1902.
- Busck, A. Report of an investigation of diseased cocoanut palms in Cuba. [Pestalozzia palmarum] p.20-23.

DIVISION OF ENTOMOLOGY. (CONT.)

Circular. 1885-1903.

- Ex - - - 52. Marlatt, C. L. The lime, sulphur, and salt wash. [1903.]
----- Ed. 2. [1904].

Insect Life. 1888-1895.

- Ex - - - v.3. Atkinson, G.F. A new root-rot disease of cotton. (Heterodera radicumicola). p.262-264. 1890.
Ex - - - v.7. Galloway, B.T. Some observations on new and old insecticides and their combination with fungicides. p.126-132. 1894.

BUREAU OF ENTOMOLOGY.

Bulletin. 1904-1918. In progress.

- 20¢ - - - 90. Woglum, R.S. Hydrocyanic-acid gas fumigation in California. 1912.
[Injurious effects on citrus trees] p.61-73.

Circular. 1904-1918. In progress.

- 5¢ - - - 120. Scott, W.M., & Quaintance, A.L. Control of the brown-rot and plum curculio on peaches. 1910.

Papers on lime-sulphur wash used as an insecticide only, have not been included.

OFFICE OF EXPERIMENT STATIONS.

Bulletin. 1889-1915.

- 10¢ - - - 16. Proc. 6th Ann. Conv. Assoc. Amer. Agr. Col. and Exp. Sta., 1892. 1893.
Goff, E.S. Notes on the treatment of apple scab. p.87-88.
Jones, L.R. A comparative test of fungicides in checking potato blight and rot. p.89-91.
Halsted, B.D. A study of fruit decays. p.91-92.
5¢ - - - 20. Proc. 7th Ann. Conv. Assoc. Amer. Agri. Col. and Exp. Sta. 1893. 1894.
Halsted, B.D. Field observations with fungi. p.93-94.
Ex - - - 33. The cotton plant, its history, botany, chemistry, culture, enemies and uses. 1896.
Atkinson, G.F. Diseases of cotton. p.279-316.
10¢ - - - 49. Proc. 11th Ann. Conv. Amer. Assoc. Agr. Col. and Exp. Sta., 1897. 1898.
Russell, H.L. A bacterial disease of cabbage and allied plants. p.86-89.
10¢ - - - 65. Proc. 12th Ann. Conv. Amer. Assoc. Agr. Col. and Exp. Sta., 1898. 1899.
Halsted, B.D. Relations of climate and rainfall to the prevalence of fungus diseases. p.126-127.
10¢ - - - 76. Proc. 13th Ann. Conv. Amer. Assoc. Agr. Col. and Exp. Sta., 1899. 1900.
Craw, A. Inspection of nursery stock and orchards. p.87-90.
15¢ - - - 99. Proc. 14th Ann. Conv. Amer. Assoc. Agr. Col. and Exp. Sta., 1900. 1901.
Woods, A.F. Plant physiology in relation to horticulture and agriculture: Pathology. p.129-130.

OFFICE OF EXPERIMENT STATIONS (CONT.)

Bulletin. (cont.)

- 10¢ - - - 115. Proc. 15th Ann. Conv. Amer. Assoc. Agric. Col. and Exp. Sta., 1901.
1902.
Webber, H.J. Root knot of the cowpeas. p.113-114.
- 10¢ - - - 123. Prof. 16th Ann. Conv. Amer. Assoc. Agr. Col. and Exp. Sta., 1902.
1903.
Wilcox, E.M. Plant physiology and pathology in college curicu
p.108-111.
- - - - - Plant breeding to secure resistant forms. p.117-1
- Ex - - - 142. Proc. 17th Ann. Conv. Amer. Assoc. Agr. Col. and Exp. Sta., 1903. 1
Orton, W. A. Crop rotation in the southern states as influenc
by plant diseases. p.160-166.
Stevens, F.L. The history of the tobacco wilt in Granville Cou
North Carolina. p.166-168.
- 15¢ - - - 170. Smith, J. G. Report on agricultural investigations in Hawaii,
1905. 1906.
Diseases of plants. p.64-65.
- 15¢ - - - 196. Proc. 21st Ann. Conv. Amer. Assoc. Agr. Col. and Exp. Sta., 1907. 1
Stewart, F. C. Progress in the control of fungus and bacteri
plant diseases. p.96 - 99.
Stone, G. E. The relation of cultural conditions to plant
diseases. p.110-112.

Experiment Station Record. v.1, 1889/90 - v.39, 1918. In Progress.

Each number contains abstracts of literature, under heading
"Plant diseases".

- 5¢ - - - V.7. Galloway, B.T. The pathology of plants. p.725-735. 1896.

Farmers' Institute Lecture. 1904-1912.

- Ex - - - 2. Stewart, F.C., Syllabus of illustrated lecture on potato dis-
& Eustace, H.J. seases and their treatment. 1904.
----- Revised 1907.

Hawaii Agricultural Experiment Station.

Report of the Division of plant pathology. 1916-1918. (In progress.) In
the Report of the Station.

C. W. Carpenter, plant pathologist, 1916-1918.

"The division of plant pathology was established in June 1,
1916. Previous to that date the investigations of diseases of
plants had been limited to such studies as could be made by mem-
bers of the staff incidental to other lines of work". (See Rpt.
1916, p.25).

Bulletin. 1901-1918. In progress.

- Ex - - - 2. Sodgwick, T. F. The root rot of taro. 1902. (A synopsis of this
was issued in the Hawaiian language, as Press
Bul. 4 of the station).

OFFICE OF EXPERIMENT STATIONS. (CONT.)

Hawaii Agricultural Experiment Station.(cont.)

Bulletin, (Cont.)

- 5¢ - - - 7. Higgins, J.E. The banana in Hawaii. 1904.
Diseases of the banana. p.30-32.
5¢ - - - 9. Higgins, J.E. Citrus fruits in Hawaii. 1905.
Diseases. p.22-25.
10¢ - - - 12. Higgins, J.E. The mango in Hawaii. 1906.
Diseases. p.22-23.
Ex - - - 25. Higgins, J.E., The avocado in Hawaii. 1911.
et al Control of diseases. p.23-26.
Ex - - - 29. Wilcox, E.V., & Ornamental hibiscus in Hawaii. 1913.
Holt, V.S. Insects and diseases. p.16-17.

Extension bulletin. 1917-1918. In progress.

- Ex - - - 4. (Emerg.ser.II.) Carpenter, C.W. Methods of combating garden pests. 1917.
Ex - - - 8. (Emerg.ser.VI.) Carpenter, C.W. Bean spot disease. 1918.

Press bulletin. [1902]-1918. In progress.

- Ex - - - 3. Sedgwick, T.F. Preliminary experiments with the "quick blight" of
the potato. [1902].
Ex - - - 4. Sedgwick, T.F. Na hoa no ke pale ana i ka pala o ke kalo. [Root rot
of taro]. Summary in Hawaiian language of Bul. 2.
Ex - - - 9. Smith, J.G. Two plant diseases in Hawaii. 1904.
Ex - - - 51. Johnson, M.O. The spraying of yellow pineapple plants on manganese
soil with iron sulphate solutions. 1916.

Porto Rico Agricultural Experiment Station.

Report. 1900/01-1917. In progress.

- Ex - - - 1915. Fawcett, G.L. A Porto Rican disease of bananas. p.36-41. 1916.
Ex - - - Report of the entomologist and botanist, 1903-1907. In the Report of
the Station. June
Entomologist and botanist, 1903, 1905, O.W. Barrett; 1906-1907,
W.V. Tower.
Ex - - - Report of the plant pathologist, 1908-1917. In the Report of the Sta-
tion. Plant pathologist, 1908-1914, G. L. Fawcett; 1915-1916, E.
W. Brandes; 1917, E. H. Thomas.
Ex - - - Report of the chemist and assistant chemist, 1911, 1913-1916. In the
Report of the Station.
Chemist, P. L. Gile; Assist. chemist, J. O. Carrero.
Gives reports of studies on lime induced chlorosis. 1916
report state that work was completed and published in various
journals.

OFFICE OF EXPERIMENT STATIONS. (CONT.)

Porto Rico Agricultural Experiment Station. (Cont.)

- Bulletin. 1902-1918. In progress.
- 5¢ - - - 6. Barrett, O.W. The yautias, or taniers, of Porto Rico. 1905.
Diseases. p.22-23.
Spanish edition. Las yautias de Puerto Rico. 1905.
- 15¢ - - 8. Henrickson, H.C. Pineapple growing in Porto Rico. 1909.
& Iorns, M.J. Diseases and insects. p.38-42.
- 10¢ - - 9. May, D.W. Sugar cane in Porto Rico. 1910.
Diseases. p.38-39.
- Ex - - - 11. Gile, P.L. Relation of calcareous soils to pineapple chlorosis.
1911.
Spanish edition. Relación entre los terrenos calcareos y la clorosis de la pima. 1913.
- 10¢ - - - 17. Fawcett, G.L. Fungus diseases of coffee in Porto Rico. 1915.
Spanish edition. Enfermedades del café causadas por hongos en Puerto Rico. 1916.

Circular. [1903] - 1918. In progress.

- Ex - - - 11. Loew, Oscar Soil disinfection in agriculture. 1909.
- Ex - - - 12. Loew, Oscar On the "sick" soils of Porto Rico. 1910.
- 5¢ - - - 17. Van Zwaluwenburg Some means of controlling insects, fungi, and
R.H. & Thomas, H.E. other pests in Porto Rico. 1918.
----- Methods and formulas used in plant disease control.
p.24-28.

FEDERAL HORTICULTURAL BOARD.

Created 1912, by Federal quarantine act: "An act to regulate the importation of nursery stock and other plants and plant products" etc., U. S. Statutes at large 62nd. Cong., 2nd Sess., Chap. 306, p.315-319. Aug. 20, 1912. Issued with amendments in separate form: "The plant quarantine act, August. 20, 1912, as amended March 4, 1913, and March 4, 1917". (For first "Rules and regulations for the enforcement of the act", see under Office of the Secretary.)

Beginning in 1914 the decisions, notices, quarantines, regulations, etc., issued in separate form, were reprinted each month in the Service and Regulatory Announcements, indexed yearly. Since that time, therefore, the S.R.A. constitute a complete set of the publications of the board, with the exception of the Annual report, and the Quarterly Letter of Information. For historical purposes the separate Notices of Quarantine, pertaining to Plant diseases, are listed here, and such miscellaneous publications as were issued previous to the S.R.A., even though they may have been superseded by later notices, orders, etc.

FEDERAL HORTICULTURAL BOARD (CONT.)

Notice of Quarantine. 1912-1918.

- 5¢ - - - 1. White pine blister rust. Sept. 16, 1912.
Superseded by Notice of Quarantine no. 7, May 21, 1913.
- 5¢ - - - 3. Potato wart. Sept. 28, 1912.
- 5¢ - - - 7. White pine blister rust. May 21, 1913.
Amended Feb. 29, 1916. (S.R.A., p.29-30. Feb.1916.)
Amended Apr. 21, 1917. (S.R.A., p.41-42. Apr.1917.)
- 5¢ - - - 11. Powdery scab of potato. Dec. 22, 1913
Revoked, Dec.9,1915, and restrictive order of same date substituted. (S.R.A., p.97, Dec. 1915.)
- 5¢ - - - 14. Powdery scab of potato. (Domestic.)Apr.25,1914.(S.R.A.,p.19,Apr.1914.)
Revoked,Aug.30,1915. (S.R.A. p.57-58, Aug.1915.)
- 5¢ - - - 15. Sugar cane. June 6,1914. (S.R.A. p.29, June,1914.)
- 5¢ - - - 16. Sugar cane. June 6, 1914. (Domestic). (S.R.A. p.29-30, June,1914.)
- 5¢ - - - 18. Powdery scab of potato. November 14,1914. (Domestic). (S.R.A., p.82
Nov., 1914.)
(Revoked, Aug. 30, 1915. S.R.A., p.57-58, Aug. 1915.)
- 5¢ - - - 19. Citrus canker and other citrus diseases. Dec. 10,1914. (S.R.A. p.89.
Dec. 1914.)
- 5¢ - - - 21. Downy mildews of corn. Mar. 8,1915. (S.R.A. p.9-10. Mar.,1915.)
Superseded by Quarantine 24, 1916. - April 29.
- 5¢ - - - 24. Corn diseases. Apr. 29,1916. (S.R.A., p.57-58. Aug. 1916.)
Amended Mar. 1, 1917. (Not reprinted in S.R.A.)
Amended Apr.23,1917. (S.R.A. p.43, Apr. 1917.)
- 5¢ - - - 26. White pine blister rust. April 21, 1917. (Domestic). (S.R.A.,p.41-42
Apr. 1917.)
Amended May 1, 1907.
- 5¢ - - - 28. Citrus fruit quarantine, June 27, 1917. (S.R.A., p.79-81. July,1917.)
- 5¢ - - - 34. Bamboo quarantine. Aug. 8, 1918. (S.R.A., p.82, Aug. 1918.)
- 5¢ - - - 37. Nursery stock, plant, and seed quarantine. Nov. 18, 1918. (S.R.A.
p.101-108. Oct.-Nov. 1918.)

The quarantines in force are listed at the end of each number of S.R.A.

The rules and regulations for the enforcement of these quarantines will be found in the Service and Regulatory Announcements.

Plant Quarantine Decisions.

- Ex - - - No.1-4, Mar.29,1913-July 17,1913, issued previous to Service and Regulatory Announcements. After that date, issued in S.R.A.

These decisions are in effect amendments to the rules and regulations for enforcing the plant quarantine act and the various quarantines. They have been practically discontinued.

Quarterly Letter of Information.

- Ex - - - No.1-28. 1914-1918. In progress. (No.1-8 entitled Newsletter and published montly.)

FEDERAL HORTICULTURAL BOARD (CONT.)

Report.

1913-1917/18. In progress. (In Annual Report of the Department.)

Service and Regulatory Announcements.

1914-1918. no.1-57. (Oct.-Nov.1918 Issued Jan 7,1919.) In progress.

"Contains Notices of quarantine, Plant quarantine decisions, and rules and regulations, formerly issued as separate publications only, now published in both forms."

Miscellaneous publications, previous to 1914.

Circular of information to inspectors of nursery stock. Oct. 1912-May.1913.

Order covering admission of foreign potatoes under restriction. Dec. 22, 1913.

Regulations governing the importation of potatoes into the United States. Dec. 30, 1913.

Regulations governing importations of nursery stock by the United States Department of agriculture. May 31,1913.

See also under Office of the Secretary.

FOREST SERVICE.

Report on Forestry. 1878-1884.

50¢ - - v.1, 1877.

(Prepared by F.B.Hough.) 1878.

Diseases and other injuries of forest trees.p.174-190

Unnumbered circulars. 1907-1914.

Ex - - - Dana, S.T. Extent and importance of the white pine blight. 1906.

5¢ - - - Hodson,E.R. Extent and importance of the chestnut bark disease. 190

25¢ - - - Meinecke,E.P. Forest tree diseases common in California and Nevada.
A manual for field use. 1914.

(The subject of wood preservation is treated in many bulletins, and circulars, and in the annual reports of the forester. These articles are not listed here.)

DIVISION OF GARDEN AND GROUNDS.

Report of Superintendent. 1883-1893. (In Ann. Rpt. Dept. of Agr.)
By William Saunders, superintendent.

INSECTICIDE AND FUNGICIDE BOARD.

Insecticide Decision. 1911-1912.

Ex - - - 6. Inert and active ingredients of Bordeaux mixture. 1912.

Ex - - - Notice of Insecticide Act Judgment. No. 1-88. 1912-1914.
(Includes fungicides).

Report. 1912-1918. (In Ann. Rpt. Dept. of Agr.)

DIVISION OF MICROSCOPY.

Ex - - - Report of Chief. 1872-94. (For contents 1872-76, see under Ann. Rpt. Dept. of Agr. for those years, p.4-5.)
By Thomas Taylor, microscopist.
No reports issued for 1877-88.

BUREAU OF PLANT INDUSTRY.

Organized July 1, 1901, by the consolidation of various divisions of the department, of which the Division of Vegetable Physiology and Pathology was one, its publications appearing thereafter in the bureau series of bulletins and circulars. The early bulletins of the bureau issued from the pathological offices bore the caption "Office of Pathological and Physiological Investigations", but this was later dropped. July 1, 1913, the bureau series of bulletins and circulars was discontinued and all publications thereafter have appeared in the general department series of Bulletins and Farmers' Bulletins, or as articles in the Journal of Agricultural Research, with the exception of some popular circulars issued as office series.

Report of the Chief. 1901-1918. (In Ann. Rpt. Dept. of Agr. In progress.)
1901-1909, 1911-12. report by B. T. Galloway, chief.
1910, report by G. H. Powell, acting chief.
1913-1918, report by W.A. Taylor, Chief.

Following reports of field laboratories will be found in Ann. Rpt. Dept. of Agr.

Pacific Coast Laboratory, [Santa Ana, Cal. Annual report] (Title varies) 1889-1906. 1889-1900 in Report of Chief, Div. of vegetable physiology & pathology. 1901-1906 in Report of chief, Bureau of Plant industry.

Subtropical Laboratory and Garden, [Miami, Fla. Annual report] (Title varies) 1892-1908. 1892-1900 in Report of chief, Div. of vegetable physiology and pathology. 1901-1908 in Report of chief, Bureau of Plant Industry.

BUREAU OF PLANT INDUSTRY. (CONT.)

Mississippi Valley Laboratory. St. Louis, Mo. Annual report
(Title varies) 1901-1906. In report of Chief, Bureau of
Plant Industry.

		Bulletin.	1901-1913.	
10¢	-	8.	Patterson, F.W.	A collection of economic and other fungi prepared for distribution. 1902.
Ex	-	14.	Schrenk, H. von	The decay of timber and the methods of preventing it. 1902.
Ex	-	17.	Some diseases of the cowpea..	1902.
			I. Orton, W.A.	Wilt disease and its control.
			II. Webber, H.J. & Orton, W.A.	A cowpea: resistant to root knot (<i>Heterodera radicicola</i>).
5¢	-	18.	Woods, A.F.	Observations on the mosaic disease of tobacco. 1903.
15¢	-	29.	Smith, E.F.	The effect of black rot on turnips. 1903.
Ex	-	32.	Schrenk, H. von	A disease of the white ash caused by <i>Polyporus fraxinophilus</i> . 1903.
30¢	-	36.	Schrenk, H. von	The "blueing" and the "red rot" of western yellow pine. 1903.
15¢	-	37.	Swingle, D.B.	Formation of the spores in the sporangia of <i>Rhizopus nigricans</i> and of <i>Phycomyces nitens</i> . 1903.
Ex	-	44.	Schrenk, H. von	The bitter rot of apples. 1903
5¢	-	51, pt. 1.	McKenney, R.E.B.	The wilt disease of tobacco and its control. (Miscellaneous papers, p.5-8) 1905.
15¢	-	52.	Rolfs, P.H.	Wither-tip and other diseases of citrus trees and fruits caused by <i>Colletotrichum gloeosporioides</i> . 1904.
10¢	-	55.	Smith, E.F., & Swingle, D.B.	The dry rot of potatoes due to <i>Fusarium oxysporum</i> . 1904.
10¢	-	60.	Townsend, C.O.	A soft rot of the calla lily. 1904.
10¢	-	63.	Carleton, M.A.	Investigations of rusts. 1904.
5¢	-	87.	Jones, L.R.	Disease resistance of potatoes. 1905.
5¢	-	90, pt. 2.	Hedgcock, G.G.	The crown-gall and hairy-root diseases of the apple tree. (Miscellaneous papers, p.15-16) 1906.
10¢	-	93.	Scott, W.M.	The control of apple bitter-rot. 1906.
5¢	-	100, pt. 1.	Shear, C.L.	Cranberry spraying experiments in 1905. (Miscellaneous papers. p.7-12.) 1907.
5¢	-	pt. 2.	Schrenk, H. von, & Hedgcock, G.G.	The wrapping of apple grafts and its relation to the crown-gall disease. (Miscellaneous papers p.13-20) 1907.
5¢	-	102, pt. 5.	Shear, C.L., & Miles, G.F.	The control of Texas root-rot of cotton. (Miscellaneous papers p.39-42). 1907.
20¢	-	110.	Shear, C.L.	Cranberry diseases. 1907.
15¢	-	114.	Schrenk, H. von	Sap-rot and other diseases of the red gum. 1907.
5¢	-	121, pt. 5.	Scott, W.M., & Rorer, J.B.	Apple leaf-spot caused by <i>Sphaeropsis malorum</i> . (Miscellaneous papers. p.47-54) 1908.
5¢	-	pt. 6.	Metcalf, Haven	The immunity of the Japanese chestnut to the bark disease. (Miscellaneous papers p.55-56) 1908.
5¢	-	122.	Townsend, C.O.	Curly-top, a disease of the sugar beet. 1908.
15¢	-	123.	Powell, G. H. et al	The decay of oranges while in transit from California. 1908.
5¢	-	131, pt. 3.	Hedgcock, G.G.	The cross-inoculation of fruit trees and shrubs with crown-gall. (Miscellaneous papers p.21-22) 1908.

BUREAU OF PLANT INDUSTRY (CONT.)

Bulletin (Cont.)

5¢ - -	131.pt.4.	Smith, E. F.	Recent studies of the olive-tubercle organism. (Miscellaneous papers. p.25-43.) 1908.
5¢ - -	141.pt.2.	Smith, E. F.	The Granville tobacco wilt. (Miscellaneous papers. p.17-24) 1909.
5¢ - -	pt.5.	Metcalf, Haven	The present status of the chestnut bark disease. (Miscellaneous papers p.45-54.) 1909.
15¢ - -	144.	Scott, W.M., & Rorer, J.B.	Apple blotch, a serious disease of southern orchards. 1909
Ex - -	149.	Schrenk, H. von	Diseases of deciduous forest trees. 1909.
15¢ - -	152.	Freeman, E.M., & Johnson, E. C.	The loose smuts of barley and wheat. 1909.
15¢ - -	155.	Shear, C.L., et al	The control of black-rot of the grape. 1909.
15¢ - -	158.	Gilbert, W.W.	The root-rot of tobacco caused by <i>Thielavia basic</i> 1909.
10¢ - -	166.	Bray, W.L.	The mistletoe pest in the Southwest. 1910.
25¢ - -	171.	Patterson, F.W., et al.	Some fungous diseases of economic importance. 1910.
10¢ - -	174.	Scott, W.M., & Ayers, T.W.	The control of peach brown-rot and scab. 1910.
15¢ - -	181.	Shaw, H. B.	The curly-top of beets. 1910
10¢ - -	183.	Hedgcock, G.G.	Field studies of the crown-gall of the grape. 1910.
20¢ - -	186.	Hedgcock, G.G.	Field studies of the crown-gall and hairy-root of the apple tree. 1910.
20¢ - -	206.	Spaulding, P.	The blister rust of white pine. 1911.
40¢ - -	213.	Smith, E.F., et al	Crown-gall of plants: its cause and remedy. 1911.
10¢ - -	214.	Spaulding, P.	The timber rot caused by <i>Lenzites sepiaria</i> . 1911.
15¢ - -	216.	Freeman, E.M., & Johnson, E. C.	The rust of grains in the United States. 1911.
5¢ - -	217.	Bessey, E. A.	Root-knot and its control. 1911.
5¢ - -	224.	Johnson, E.C.	Timothy rust in the United States. 1911.
Ex - -	225.	McCulloch, L.	A spot disease of cauliflower. 1911.
20¢ - -	226.	Heald, F.D., & Wolf, F. A.	A plant-disease survey in the vicinity of San Antonio, Texas. 1912.
30¢ - -	228.	Johnson, J. R.	The history and cause of the coconut bud-rot. 1911.
30¢ - -	245.	Jones, L.R., et al	Investigations of the potato fungus <i>Phytophthora infestans</i> . 1912.
15¢ - -	247.	Hedges, Florence & Tenny, L.S.	A knot of citrus trees caused by <i>Sphaeropsis tumefaciens</i> . 1912.
15¢ - -	250.	Whetzel, H.H., & Rosenbaum, J.	The diseases of ginseng and their control. 1912.
20¢ - -	252.	Shear, C.L., & Wood, A. K.	Studies of fungous parasites belonging to the genus <i>Glomerella</i> . 1913.
50¢ - -	255.	Smith, E.F., et al	The structure and development of crown-gall; a plant cancer. 1912.
20¢ - -	263.	Norton, J. B.	Methods used in breeding asparagus for rust resistance. 1913.
5¢ - -	265.	Hawkins, L.A.	Some factors influencing the efficiency of Bordeaux mixture. 1912.
10¢ - -	270.	Alsberg, C.L., & Black, O. F.	Contributions to the study of maize deterioration. 1913.
5¢ - -	277.	Bunzel, H.H.	A biochemical study of the curly-top of sugar beets. 1913.

BUREAU OF PLANT INDUSTRY (CONT.)

Bulletin. (Cont.)

- 5¢ - - 280. Roberts, J.W. The "rough-bark" disease of the yellow Newtown apple. 1913.
10¢ - - 281. Harter, L.L., & A dry rot of sweet potatoes caused by *Diaporthe* *bratensis*. 1913.
Field, E.C.

Circular. 1908-1913.

- 5¢ - - 1. Scott, W.M. Self-boiled lime-sulphur mixture as a promising fungicide. 1908.
5¢ - - 3. Hedgcock, G.G. Some stem tubers or knots on apple and quince trees. 1908.
5¢ - - 4. Spaulding, P. The treatment of damping-off in coniferous seedlings. 1908.
5¢ - - 7. Briggs, L. J. The field treatment of tobacco root-rot. 1908.
5¢ - - 8. Freeman, E.M., & The smuts of sorghum. 1910.
Umberger, H.J.
5¢ - - 9. Shear, C.L., & Texas root-rot of cotton: field experiments in 1907. 1908.
Miles, G. F.
5¢ - - 19. Tenhy, L.S., The decay of Florida oranges while in transit and on the market. 1908.
et al
5¢ - - 23. Orton, W. A. Potato diseases in San Joaquin County, California. 1908.
5¢ - - 26. True, R.H., & Some factors affecting and keeping qualities of American lemons. 1909.
Sievers, A.F.
Ex - - 27. Scott, W.M. Lime-sulphur mixtures for the summer spraying of orchards. 1909.
5¢ - - 35. Spaulding, P. The present status of the white-pine blights. 1909.
5¢ - - 36. Johnston, J.R. The bud-rot of the coconut palm. 1909.
5¢ - - 38. Spaulding, P. European currant rust on the white pine in America. 1909.
Ex - - 39. Harter, L.L. The decay of cabbage in storage: its cause and prevention. 1909.
Ex - - 52. Orton, W.A., & Wart disease of the potato: a dangerous European disease liable to be introduced into the United States. 1910.
Field, E.C.
Ex - - 54. Scott, W.M. The substitution of lime-sulphur preparations for Bordeaux mixture in the treatment of apple diseases. 1910.
5¢ - - 58. Waite, M.B. Experiments on the apple with some new and little-known fungicides. 1910.
5¢ - - 65. Hawkins, L.A. Grape-spraying experiments in Michigan in 1909. 1910.
5¢ - - 76. Kellerman, K.F. The relation of crown-gall to legume inoculation. 1911.
5¢ - - 85. Smith, E. F. Crown-gall and sarcoma. 1911.
5¢ - - 91. Scofield, C.S. The nematode gallworm on potatoes and other crop plants in Nevada. 1912.
5¢ - - 92. Orton, W.A., & The control of cotton wilt and root-knot. 1912.
Gilbert, W.W.
5¢ - - 93. Stuart, W., & The danger of using foreign potatoes for seed. 1912.
Orton, W.A.
5¢ - - 105. Hawkins, L.A. Experiments in the control of grape anthracnose. 1913.
5¢ - - 109. Orton, W.A. Potato leaf-roll. (Miscellaneous papers p.7-10). 1913.
Ex - - 110. Orton, W. A. Powdery dry-rot of the potato. (Miscellaneous papers p.13-15.) 1913.
Mann, A. Fungous staining of cotton fibers. (Miscellaneous papers p.27-28). 1913.
Ex - - 112. Scott, W.M., & The Jonathan fruit spot. (Miscellaneous papers p.11-12). 1913.
Roberts, J.W.

BUREAU OF PLANT INDUSTRY (CONT.)

Circulars. (Cont.)

- Ex - - 114. Harter, L.L. Control of the black-rot and stem-rot of the sweet potato. (Miscellaneous papers. p.15-18) 1913.
- Ex - - 118. Kellerman, K. F. Excretion of cytase by *Penicillium pinophilum*. 1913.
- 5¢ - - 120. Cook, O. F. Leaf-cut or tomopsis, a disorder of cotton seedlings. (Miscellaneous papers p.29-34) 1913.
- 5¢ - - 121. Pool, V.M., & McKay, M.B. The control of the sugar-beet leaf-spot. (Miscellaneous papers p.29-30) 1913.
- Ex - - 124. Grossenbacher, J.G. Experiments on the decay of Florida oranges. (miscellaneous papers p.17-23) 1913.
- 5¢ - - 126. Field, E. C. Fungous diseases liable to be disseminated in shipments of sugar cane. (Miscellaneous papers p.3-13) 1913.
- Ex - - 127. Melhus, I. E. Silver scurf, a disease of the potato. (Miscellaneous papers p.16-24) 1913.
- Ex - - 129. Spaulding, P. The present status of the white-pine blister rust. (Miscellaneous papers p.9-20.) 1913.
- Ex - - 131. Shear, C.L., & Stevens, N. E. Cultural characters of the chestnut-blight fungus and its near relatives. (Miscellaneous papers p.3-18) 1913.

Miscellaneous papers.

Published in the Circulars, q.v.

[Miscellaneous publications.] 1902-[1917 .]

- Ex - - - Bean anthracnose. 1907. Doc. no. 330.
- Ex - - - Cotton anthracnose. 1907. Doc. no. 331.

See also the miscellaneous and numbered circulars under the separate offices of the bureau: Cotton, Truck and Forage crop disease investigations, Farmers' cooperative demonstration work; Pomology, Field investigations: Forest Pathology; Seed and plant introduction and distribution.

Office of Agricultural Technology.

Circular. 1918.

- Ex - - - 1. Cobb, N.A. Estimating the nema population of soil, with special reference to the sugar-beet and root-gall nemas, *Heterodera Schachtii* Schmidt and *H. radiculicola* (Greef) Muller, and with a description of *Tylencholaimus aequalis* n. sp. 1918.

BUREAU OF PLANT INDUSTRY (CONT.)

Office of Cereal Investigations.

See Office of the Secretary Circular 114. Contrib. Bur. Plant Indus., Office Cereal Invest.

Office of Cotton, Truck & Forage Crop Disease Investigations.

Circular. 1918.

- Ex - - - 1. Orton, W.A., & Link, G.K.K. Powdery dry rot of potato. 1918.
- Ex - - - 2. Potato black-heart. 1918.
3. Orton, W. A. Selections and treatment of seed potatoes to avoid diseases. 1918.
4. Pritchard, F.J., The control of tomato leaf-spot. 1918.
& Clark, W.B.
5. Edson, H.A., & Stuart, Wm. Growing high-grade potato seed stock. 1918.

Farmers' Cooperative Demonstration Work.

[Miscellaneous] 1908-1915.

- Ex - - - Orton, W.A. The control of cotton wilt and root-knot. 1911.
Doc. 648.

Plant Disease Survey

- Ex - - - Plant disease Bulletin. [v.1]- v.2. 1917-1918. In progress.
Mimeographed. v.1, has 8 nos., v.2, 15 nos.

Pomology, Field Investigations.

[Miscellaneous] 1908-1911.

- Ex - - - Stubenrauch, A.V. Factors affecting the keeping quality of table grapes while in transit and in storage. 1908.
Doc. 392.
- Ex - - - Stubenrauch, A.V. The relation of handling to decay in California navel oranges; season of 1910-11. 1911. Doc. 676.

BUREAU OF PLANT INDUSTRY (CONT.)

Seed and Plant Introduction and Distribution.

[Miscellaneous] [1903] - 1908.

- Ex - - - - Wilt resistant Jackson cotton. n.d. [Doc.3]
Ex - - - - Orton, W. A. Rivers sea island cotton; a variety resistant to the wilt disease or "black-root". [1903. Doc.21]
Ex - - - - Orton, W.A. Iron cowpea. (A variety resistant to wilt and root-knot.) [1903. Doc.24]
Ex - - - - Orton, W. A. Rivers sea island cotton. 1903. [Doc.57]
Ex - - - - Orton, W. A. Iron cowpea. 1904. [Doc.84]
Ex - - - - Orton, W. A. Wilt resistant Jackson cotton. 1904. [Doc.88]
Ex - - - - Orton, W. A. Distribution of Centerville sea island cotton seed. 1905. Doc 143.
Ex - - - - Orton, W. A. Circular of information to accompany seed of wilt-resistant upland cotton, 1907. 1907. Doc. 263.

Western Irrigation Agriculture.

Circular. 1914-1918.

- 5¢ - - - - 23. Work on Truckee-Carson Reclamation Project Farm 1917. Oct.1918.
Headley, F.B. Experiments with eel-worm infested potatoes.
p. 18-21.

DIVISION OF POMOLOGY.

Bulletin. 1888-1901.

- Ex - - - - 4. Report on the relative merit of various stocks for the orange, with notes on mal di gomma [compiled by W.R.King.] 1891.
Mal di gomma, p.18-19.
Ex - - - - 5. Earle, F. S. Fig culture in the Gulf states. 1897.
Insect enemies and diseases. p.26-28.
50¢ - - - - 9. Eisen, G. The fig. 1901.
Diseases. p.176-179.

OFFICE OF THE SECRETARY.

Circular. 1896-1918. In progress.

- 5¢ - - - - 37. Department of agriculture in relation to a national law to prevent the importation of insect-infested or diseased plants. 1911.
Ex - - - - 41. Rules and regulations for carrying out the plant quarantine act.
Ex - - - - 44. Rules and regulations for carrying out the plant quarantine act.
Ex - - - - 114. Byars, L. P. A series ellworm or nematode disease of wheat. 19
(Contr. from the Bur. of Plant Indust. Off. of Cereal Invest.)

STATES RELATIONS SERVICE.

Office of Extension North & West. Boys' & Girls' Club Work.

[Miscellaneous.] 1917 .

Ex - - - - Close, C.P. Home gardens. Insects and diseases of vegetables and how to combat them. 1917 . S.R.S. Doc.52. Ext.N

BUREAU OF STATISTICS.

Report of the Statistician. 1883-1899.

Ex - - - - N.S., no.43. Peach yellows. p.372-380. 1887. (Main object of the investigation was to show the local distribution and comparative local severity of the ravages of the disease.)

DIVISION OF VEGETABLE PHYSIOLOGY AND PATHOLOGY.

July 1, 1890, the Section of Vegetable Pathology of the Division of Botany was raised to the rank of an independent Division of Vegetable Pathology, with its own series of publications. The name was changed in 1895 to Division of Vegetable Physiology and Pathology. July 1, 1901, the division was incorporated into the Bureau of Plant Industry, and its publications thereafter appear in the series of that bureau.

For the Bulletins of the Section of Vegetable Pathology see under Division of Botany. The circulars are listed here as they are consecutive in numbering with those of the division.

Report of the Chief. 1886-1901. (In Ann. Rpt. Dept. of Agr.)

The reports for 1886 to 1889 were reports from the Section of Vegetable Pathology of the Division of Botany, the first report for 1886 having title "Report of the Mycologist".

1886-1887, report by F. Lamson-Scribner, mycologist.

1888-1889, " by B. T. Galloway, chief of section.

1888/89 to 1896/97, 1898/99 to 1899/1900 by B. T. Galloway, chief of division.

1897/98, report by A. F. Woods, acting chief of the division.

Bulletin. 1891-1901.

5¢ - - - 1. Smith, E.F. Additional evidence of the communicability of peach yellows and peach rosette. 1891.

25¢ - - - 2. Pierce, M.B. The California vine disease. A preliminary report of investigations. 1892.

10¢ - - - 3. Galloway, B.T. Report on the experiments made in 1891 in the treatment of plant diseases. 1892.

DIVISION OF VEGETABLE PHYSIOLOGY AND PATHOLOGY (CONT.)

Bulletin. (Cont.)

- 15¢ - - 4. Smith, E.F. Experiments with fertilizers for the prevention and cure of peach yellows, 1889-92. 1893.
- 15¢ - - 5. Waite, M.B. The pollination of pear flowers. 1894.
- 5¢ - - 6. Fairchild, D.G. Bordeaux mixture as a fungicide. 1894.
- 5¢ - - 7. Galloway, B.T. The effect of spraying with fungicides on the growth of nursery stock. 1894.
- Ex - - 8. Swingle, W.T.; & Webber, H.J. The principal diseases of citrous fruits in Florida. 1896.
- 5¢ - - 9. Swingle, W.T. Bordeaux mixture: its chemistry, physical properties, and toxic effects on fungi and algae. 1896.
- 5¢ - - 10. Evans, W.H. Copper sulphate and germination. Treatment of seed with copper sulphate to prevent the attacks of fungi. 1896.
- 5¢ - - 11. Smith, E.F. Legal enactments for the restriction of plant diseases. A compilation of the laws of the U.S. and Canada, 1896.
- 10¢ - - 12. Smith, E.F. A bacterial disease of the tomato, eggplant, and Irish potato. (*Bacillus solanacearum* n. sp.) 1896.
- 10¢ - - 13. Webber, H.J. Sooty mold of the orange and its treatment. 1897.
- 5¢ - - 14. Woods, A.F. The Bermuda lily disease: a preliminary report of investigations. 1897.
- 10¢ - - 16. Carleton, M.A. Cereal rusts of the United States: a physiological investigation. 1899.
- 15¢ - - 17. Smith, E.F. Wilt disease of cotton, watermelon, and cowpea (*Neocosmospora* nov. gen.) 1899.
- 5¢ - - 19. Woods, A.F. Stigmonose: a disease of carnations and other pinks. 1900.
- 20¢ - - 20. Pierce, N.B. Peach leaf curl: its nature and treatment. 1900.
- 10¢ - - 21. Schrenk, H. von Two diseases of red cedar, caused by *Polyporus juniperinus* n. sp. and *Polyporus carneus* Nees. A preliminary report. 1900.
- 10¢ - - 23. Dorsett, P.H. Spot disease of the violet. (*Alternaria violae* n. sp.) 1900.
- 10¢ - - 25. Schrenk, H. von Some diseases of New England conifers: a preliminary report. 1900.
- 5¢ - - 26. Smith, E.F. Wakker's hyacinth germ, *Pseudomonas hyacinthi*, (Wakker). 1901.
- 5¢ - - 27. Orton, W.A. The wilt disease of cotton and its control. 1900.
- 10¢ - - 28. Smith, E.F. The cultural characters of *Pseudomonas hyacinthi*, *Ps. campestris*, *Ps. phaseoli*, and *Ps. stewarti* -- four one-flagellate yellow bacteria parasitic on plants. 1901.

Circulars. [1886] -1901.

- Ex - - [1]. Treatment of the downy grape mildew (*Peronospora viticola*) and the black rot (*Phoma uvicola*). [1886].
- Ex - - [2]. Grape-vine mildew and black rot. 1886.
- Ex - - 3. Colman, N.J. Treatment of the downy mildew and black-rot of the grape. 1887.
- Ex - - 4. Scribner, F.L. Treatment of the potato and tomato for the blight and rot. 1887.
- Ex - - 5. Scribner, F.L. Fungicides, or remedies for plant diseases. 1888.
- 5¢ - - 6. Galloway, B.T. Treatment of black rot of the grape. [1888].

DIVISION OF VEGETABLE PHYSIOLOGY AND PATHOLOGY. (CONT.)

Circulars. (Cont.)

- Ex - - - 7. Galloway, B.T. Grape vine diseases. [1889]
Ex - - - 8. Galloway, B.T. Experiments in the treatment of pear leaf-blight and the apple powdery mildew. 1889
Ex - - - 9. Rusk, J.M. Root-rot of cotton. [1889.]
Ex - - - 10. Galloway, B.T. Treatment of nursery stock for leaf-blight and powdery mildew. 1891.
Ex - - - 11. Willits, E. [Black rot, downy mildew and anthracnose of the grape. 1891].
Ex - - - 12. Rusk, J. M. [Cereal rust investigations. 1891]
Ex - - - 13. Willits, E. [Peach leaf curl.] 1893.
Ex - - - 14. Mabrey, C.W. [Investigations of grain rusts.] 1894.
5¢ - - - 15. Webber, H.J. Treatment of sootymold of the orange. 1895.
Ex - - - 16. Swingle, W.T. Danger of introducing a Central American coffee disease into Hawaii. 1898,
Ex - - - 17. Galloway, B.T. New Spraying devices. 1899.

(No.1-9 were circulars of the Section of Vegetable Pathology.)

Journal of Mycology.

- Ex - - - The journal of mycology: devoted especially to the study of fungi in their relation to plant diseases. v.5-7, 1889-1894.
V.5 quarterly, v.6-7 irregular.
None published Aug. 1894, v.7, no. 4.
(V.1-4 and 8-14 published by W. A. Kellerman, et al. Vol.10 contains index to v.1-10.)

WEATHER BUREAU.

Monthly Weather Review. [1891]-1918. In progress.

- Ex - - - v.43. Jones, L.R., & Lightning injury to cotton and potato plants. p.13
Gilbert, W.W. 1915. (Abstr. of paper before Amer. Phytopath.S
6th Ann. meeting, 1914-15.)